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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,419	01/26/2005	Frederic Tort	2937-124	5654

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EXAMINER
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RONESI, VICKEY M

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

10/522,419

Applicant(s)

TORT ET AL.

Examiner

Vickey Ronesi

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29,30,33-37 and 56-88 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29,30,33-37 and 56-88 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/23/06</u> . | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

1. Please note that the examiner of record has been changed. The new examiner is Vickey Ronesi.
2. All outstanding objections are rejections are withdrawn in light of applicant's amendment filed 1/23/2006.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
4. The prior art rejections have been reconsidered in light of applicant's arguments filed 1/23/2006. New grounds of rejection are therefore set forth below. Thus, *a 2<sup>nd</sup> non-final Office action is set forth as follows.*

### *Claim Objections*

5. Claims 27, 56, 59-63, and 65-67 are objected to because of the following reasons:

With respect to claim 27, the phrase "the said" at the end of line 1 is redundant and should be replaced with either "the" or "said."

With respect to claim 56, the term "fule" in line 1 of the claim is misspelled and should read as "fuel."

With respect to claim 59, the term "the above products" lacks full antecedent basis.

With respect to claim 60, the first "and" in line 4 suggests both kerosene fractions and diesel fuel fractions are necessarily used together. It is suggested that "and" be removed or replaced with "or."

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With respect to claims 60 and 61, the phrase “the hydrocarbon fraction, with which the fraction rich in normal paraffins is mixed in order to obtain said hydrocarbon phase” lacks full antecedent basis and is redundant. It is suggested that the phrase be replaced with “the hydrocarbon fraction rich in normal paraffins.”

With respect to claims 61, 63, 65, and 67, proper Markush language “selected from the group consisting” is necessarily recited with the term “and,” not “or.” Replace “or” with “and” where suitable.

With respect to claim 62, the emulsifying agent is present in an amount of 0.5-50 wt % and such should be recited.

With respect to claim 6, the phrase ‘selected from the group consisting of catalyst’ should be deleted since it is unnecessary.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

6. Claims 76-83 and 88 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 76, it is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent

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protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 76 recites the broad recitation "C<sub>8</sub> to C<sub>22</sub>," and the claim also recites "preferably C<sub>13</sub> to C<sub>19</sub>," which is the narrower statement of the range/limitation.

With respect to claims 77-81, the term "said petroleum fraction" lacks antecedent basis.

With respect to claims 82 and 83, the term "an appropriate device" is indefinite since it is not made clear what this term is intended to encompass. Note that applicant only gives a limited list of examples of appropriate devices on page 13, lines 5-7 of the specification as originally filed.

With respect to claim 88, it is not made clear how the aqueous can be dispersed as Furnace Fuel Oil since Furnace Fuel Oil is the fuel itself and not just a component of it.

### ***Claim Rejections - 35 USC § 103***

7. Claims 29, 30, 33-36, 56-58, 60-63, 70-88 rejected under 35 U.S.C. 103(a) as being unpatentable over Berlowitz et al (US 6,325,833).

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Berlowitz discloses water-fuel emulsion blends comprising a hydrocarbon/water ratio of 90/10 to 50/50 (col. 2, lines 39-44) and 0.01-5 wt % a non-ionic surfactant (col. 3, line 4-32), wherein the hydrocarbon component contains 10-90 wt % liquid Fischer-Tropsch C<sub>5</sub>-C<sub>17</sub> derived hydrocarbons which include at least 95 wt % normal paraffins or isoparaffins (col. 2, lines 11-13) and 90-10 wt % non-Fischer-Tropsch derived hydrocarbons (col. 2, lines 24-29) like petroleum derived diesel (Table 1) and wherein the emulsions are formed by conventional emulsion technology (col. 3, lines 39-46). The emulsion contains nil sulfur and less than 0.5 wt % total aromatics (col. 2, lines 65-67). Given that the fuels are diesel in nature, they would be intrinsically useful or suitable for diesel engines and the other presently claimed applications.

While Berlowitz does not exemplify a composition with explicitly 5-35 wt % C<sub>8</sub>-C<sub>22</sub> normal paraffins, it teaches a Fischer-Tropsch phase of a hydrocarbon component that includes normal paraffins or isoparaffins of C<sub>5</sub>-C<sub>17</sub> (col. 2, lines 11-12). All of these Fischer-Tropsch paraffins are taught equally. Thus, it would have been obvious to one of ordinary skill in the art to utilize the presently claimed amounts of C<sub>8</sub>-C<sub>22</sub> normal paraffins in a water-fuel emulsion, absent a showing of unexpected or surprising results.

Note that applicant's data in the specification as originally filed is not commensurate in scope with the claimed invention and cannot serve to establish unexpected results. Case law holds that evidence is insufficient to rebut a *prima facie* case if not commensurate in scope with the claimed invention. *In re Grasselli*, 713 F.2d 731, 741, 218 USPQ 769, 777 (Fed. Cir. 1983). In particular, the examples only contain C<sub>13</sub>-C<sub>19</sub> normal paraffins which are present in an amount of 4 wt % or 11.2 wt % based on the entire fuel-water emulsion. Additionally, only hydrocarbon/water ratios of 80/20 and 90/10 are exemplified. Moreover, a showing of

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synergism could only be established with one cetane improver, 2-ethylhexyl nitrate. Some confusion with the data arises from the use of the term “diesel fuel G” which is not defined by applicant.

8. Claims 37, 59, 60, and 64-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berlowitz et al (US 6,325,833) in view of Haupais et al (US 6,068,670).

The discussion with respect to Berlowitz et al in paragraph 7 above is incorporated here by reference.

While Berlowitz et al discloses the water-fuel emulsion, it fails to disclose additives which are be advantageously use in its fuel composition.

Haupais et al discloses an emulsified fuel and teaches that conventional additives include vegetable oils (col. 1, lines 16-17), octane (cetane)-improving additives such as alkyl nitrates (col. 8, lines 8-10), a soot inhibitor such as alkaline earth metal catalysts (col. 8, lines 19-31), biocides (col. 8, lines 32-35), antifreeze (col. 8, lines 44-46)—which are all added in amounts of 0.01-5 wt % based on the total weight of the fuel (col. 8, lines 47-53) thereby including the weight ratio of the normal paraffins and the cetane improver as presently claimed.

Given that Berlowitz et al and Haupais et al are both drawn to water-fuel emulsions, it would have been obvious to one of ordinary skill in the art to utilize any of the advantageous additives taught by Haupais et al in the water-fuel emulsions of Berlowitz et al since they are known additives which impart known advantages.

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***Response to Arguments***

9. Applicant's arguments filed 3/30/2006 have been fully considered moot in light of the new grounds of rejection set forth above.

***Contact Information***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3/30/2006  
Vickey Ronesi

*VR*

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